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(71) 出願人(米国を除く全ての指定国について): 松下電 器產業株式会社 (MATSUSHITA ELECTRIC INDUS-TRIAL CO., LTD.) [JP/JP]; 〒5718501 大阪府門真市大 字門真1006番地 Osaka (JP).

(72) 発明者; および

(75) 発明者/出願人 (米国についてのみ): 吉川 昭 (YOSHIKAWA, Akira). 山田 真一 (YAMADA. Shin-ichi).

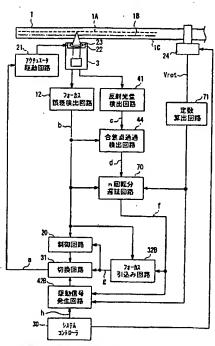
(74) 代理人: 特許業務法人池内・佐藤アンドパートナー ズ (IKEUCHI SATO & PARTNER PATENT ATTOR-NEYS); 〒5306026 大阪府大阪市北区天満橋1丁目8番 30号OAPタワー26階 Osaka (JP).

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[続葉有]

(54) Title: OPTICAL DISC CONTROLLER

## (54) 発明の名称: 光ディスク制御装置



- 21 ACTUATOR DRIVING CIRCUIT
- 21 ACTUATOR DEVINING CIRCUIT
  21. FOCUS ERROR DETECTING CIRCUIT
  41. QUANTITY OF REFLECTED LIGHT DETECTING CIRCUIT
  41. QUANTITY OF REFLECTED LIGHT DETECTING CIRCUIT
  70. N-ROTATION DELAY CIRCUIT
  71. CONSTANT CALCULATERS CIRCUIT
  20. CONTROL CIRCUIT
  31. SYNTICHING CIRCUIT
  248. REPUBLIS SYNM. COMERATING CIRCUIT

- 42B...DRIVING SIGNAL GENERATING CIRCUIT 30 SYSTEM CONTROLLER 32B...FOCUS DRAWING CIRCUIT

(57) Abstract: An optical disc controller capable of drawing focus in a short time for the target information plane of an optical disc having a plurality of information planes. An objective lens is brought close to the optical disc having a plurality of information planes by the output signal from a driving signal generating circuit. When a focus point passage detecting circuit detects passage of a first focus position and the objective lens is brought closer from that position to the optical disc by a specified amount, an n-revolution delay circuit outputs a reversal command f. After the objective lens was withdrawn from the optical disc while altering the orientation thereof, a focus drawing circuit switches a signal (a) being delivered to an actuator drive circuit from the driving signal generating circuit to a control circuit output signal and actuates the control circuit to draw the focus.

SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

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NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## 添付公開書類:

# — 国際調査報告書

2文字コード及び他の略語については、定期発行される 各PCTガゼットの巻頭に掲載されている「コードと略語 のガイダンスノート」を参照。

(57) 要約:

複数の情報面を有する光ディスクの目標情報面に対して短時間でフォーカス引き込みを行うことの可能な光ディスク制御装置を提供する。駆動信号発生回路の出力信号で対物レンズを複数の情報面を'有する光ディスクに近づけていき、合焦点通過検出回路により最初の合焦点位置の通過が検出され、その位置からさらに所定量だけ対物レンズが光ディスクに近づくと、n回転分遅延回路が反転指令fを出力し、対物レンズの向きを変えて光ディスクから遠ざけた後、フォーカス引き込み回路が、アクチュエータ駆動回路に出力する信号aを、駆動信号発生回路から制御回路の出力信号に切り換えると共に、制御回路を起動してフォーカス引き込みを行う。

#### INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2004/005510

A.		ATION OF SUBJECT	MATTER
	Int.Cl7	G11B7/085,	7/125

According to International Patent Classification (IPC) or to both national classification and IPC

#### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
Int.Cl<sup>7</sup> G11B7/085, 7/125

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Jitsuyo Shinan Koho 1922-1996 Toroku Jitsuyo Shinan Koho 1994-2004 Kokai Jitsuyo Shinan Koho 1971-2004 Jitsuyo Shinan Toroku Koho 1996-2004

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

# C. DOCUMENTS CONSIDERED TO BE RELEVANT

Japanese Patent Office

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
· A	JP 10-27357 A (Kenwood Corp.), 27 January, 1998 (27.01.98), Full text; Figs. 1 to 15 (Family: none)	1-18
<b>A</b>	JP 11-167727 A (Sony Corp.), 22 June, 1999 (22.06.99), Full text; Figs. 1 to 13 (Family: none)	1-18
<b>A</b>	JP 11-265511 A (Sony Corp.), 28 September, 1999 (28.09.99), Full text; Figs. 1 to 5 (Family: none)	1-18
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×	Further documents are listed in the continuation of Box C.	See patent family annex.
* "A"	Special categories of cited documents: document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" "L"	earlier application or patent but published on or after the international filing date document which may throw doubts on priority claim(s) or which is	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"O"	cited to establish the publication date of another citation or other special reason (as specified) document referring to an oral disclosure, use, exhibition or other means document published prior to the international filing date but later than	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
	the priority date claimed	"&" document member of the same patent family
Date	of the actual completion of the international search 12 May, 2004 (12.05.04)	Date of mailing of the international search report 01 June, 2004 (01.06.04)
Name	and mailing address of the ISA/	Authorized officer

Authorized officer

# INTERNATIONAL SEARCH REPORT

International application No.
PCT/JP2004/005510

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT  Category*  Citation of document, with indication, where appropriate, of the relevant passage		Relevant to claim No.
Category*	JP 2002-373431 A (Kabushiki Kaisha Hitachi LGData	1-18
	JP 2002-373431 A (Kabushiki Kaisha Masasa Storage), 26 December, 2002 (26.12.02), Full text; Figs. 1 to 13 (Family: none)	
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